THUNDERBOTS

2022 Summary Business Plan



NEW HOME, NEW TEAM, SAME DRIVE FOR EXCELLENCE

MISSION STATEMENT

"To educate and inspire high school students to become the next generation of science and technology leaders by building a competitive robot through the guidance of professional mentors, corporate sponsors, and parents in alignment with FIRST core values."

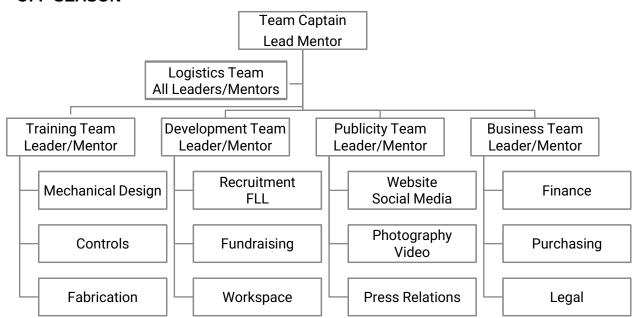
TEAM HISTORY & GROWTH

Team 980 was founded in September 2001 in La Canada-Flintridge, CA, with 10 students and 3 mentors. As of the 2022 build season we have approximately 35 students and 10 mentors and is now situated in the STEAM Lab at Burbank HS, the home of the Burbank HS NAF Academy, charting a course for Team 980's sustained growth over the coming years.

ORGANIZATIONAL STRUCTURE

Team 980 has three organizational charts for the three periods of the year: Build Season, Competition Season and Off-Season. The other charts are included as an appendix.

OFF-SEASON





RISK ANALYSIS

Since 2015, Team 980 has used a Strengths, Weaknesses, Opportunities, and Threats (SWOT) Analysis to identify risks to our team as well as the strengths we use to overcome our challenges and expand our successful program. Our SWOT Analysis for 2022 follows:

Our strategy is **W-O**, which means overcoming our <u>weaknesses</u> by realizing our <u>opportunities</u>.

	HELPFUL	HARMFUL
INTERNAL FACTORS	STRENGTHS • Mentor expertise and dedication • Major sponsors (NASA/JPL, Boeing, Raytheon,WDI) • Adaptability • Diversity - students from different schools and backgrounds • Driven strongly by goals • Leadership • Initiative • Teamwork	weaknesses Internal communication Time management Focus Student fundraising / sponsor recruitment Inconsistent ranking at competitions
EXTERNAL FACTORS	 OPPORTUNITIES The only FRC team Burbank Many schools to recruit from Many companies to fundraise from Many local organizations to share community events Many FIRST teams to contact for inter-team activities Training and education available Competitive across range of available awards Opportunities to mentor new FLL and JrFLL teams Location on BUSD campus. 	THREATS • Losing students to graduation • Losing our build space • Losing sponsors • Losing mentors • Other competitive teams • Worldwide pandemic



MARKETING

Over the past several years, Team 980 has evolved from a solid engineering team to a well-rounded FRC team, culminating in our Regional Chairman's award in 2018. In parallel, we have honed our message, bringing in consistency across our promotional materials and developing a clear focus for our outreach events.

We run an offseason calendar of community outreach events: LEGO Robo-Camp/Virtual STEM Camp for middle school students to raise awareness of STEM and Robotics, our annual Toy Drive for the ABC7 & Southern California Firefighters Spark of Love Toy Drive, and STEM and Robotics advocacy and demonstrations through Open Houses and in front of civic and government entities like the Burbank City Council.

Part of our mission is to support FIRST across all programs. Additionally, we support LA Robotics by participating and providing volunteers for their various events. We support FLL by mentoring FLL teams, as well as volunteering at qualifying and regional tournaments in Los Angeles. Our mentors are key volunteers at regional FRC events and at Championships.

FINANCIALS

Team 980's 2023 Operating budget is included as an appendix.

Our income includes grants from NASA/JPL, Boeing, Raytheon and Walt Disney Imagineering. We utilize the summary business plan and the FIRST sponsor packet template to recruit additional sponsors. We use Piggybackr for crowdsourced fundraising. Participating students create their own web page describing their motivation for participating in FIRST, then invites family and friends via email to visit their page and help them reach their fundraising goals. We have enrolled in several community rewards programs, including Ralphs/Food4Less, eScrip and AmazonSmile.

Team 980's expenses are relatively consistent. We register for two regional competitions and a few off-season events (scrimmages/workshops). Other expenses include robot construction and marketing/outreach. Our basis-of-estimate for parts, materials and supplies are based on 20 years of robot building experience. Our mechanical/fabrication mentors do "make-buy" decisions based on their own professional experience.

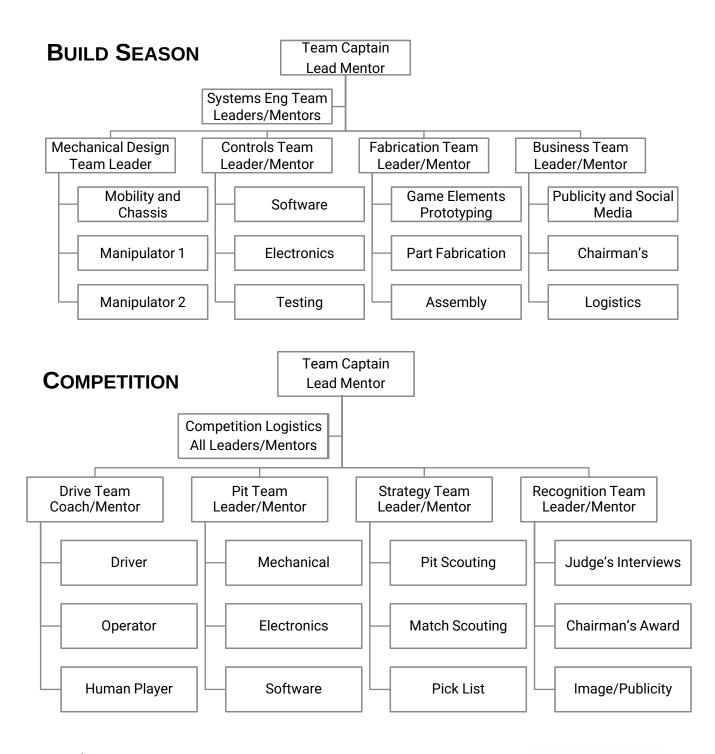
Team 980 has a contingency plan for raising funds to attend Championship. We are looking to create a reserve and recruit special sponsors who will commit the registration fee. Our students raise their own travel/lodging funds to participate in Championship.

Team 980 is a 501(c)(3) corporation, registered with the CA Registry of Charitable Trusts and a Silver member of GuideStar information service for nonprofits.





APPENDIX A: ADDITIONAL ORGANIZATIONAL CHARTS







APPENDIX B: FINANCIAL STATEMENTS

FRC Team 980 ThunderBots **Estimated 2023 Operating Budget**

Income: \$30,500

Sponsors: \$20,000

– NASA/JPL

Walt Disney Company

Boeing

Raytheon

Private Donations: \$10,000

Team Fundraising: \$500

Amazon Smile

Chipotle

Misc. Community Rebate programs

Expenses: (\$28,500)

Event Registration Fees: (\$9,500)

Los Angeles, Aerospace Valley (\$9,000)

LA Robotics Events: (\$500)

Team Expenses: (\$19,000)

Parts, materials, tools, etc.: (\$10,500)

Insurance, IT services: (\$2,800)

Shirts, promotional materials: (\$5,200)

- Other: (\$500)

Additional income needed if Team 980 qualifies for Championships: \$15,500

-- Championships Fundraising: \$15,500

Additional expenses if Team 980 qualifies for Championships: (\$15.500)

— FIRST Championship: (\$5,000)

Travel: (\$10,500)





APPENDIX C: BALANCED SCORECARD

GOALS PERSPECTIVE **OBJECTIVES** INDICATORS Dec-21 Dec-22 Dec-23 Dec-24 Inspire a growing number of high school Number of students participating 60 45 55 60 hroughout the year Average number of training hours in STEM per year x number of registered Educate HS students in STEM 1000 hours received 7700 hours received 9900 hours received 11000 hours received members (220 hours per year per Mission Growing number of members Number of registered members 45 35 45 50 Maintain mentors engagement Number of registered mentors 16 10 12 14 Make it into eliminations in at least one ves ves ves ves regional tournament Be an effective team Be awarded at least one individual or yes yes yes yes eam award Number of teams that we support or partner to execute an activity Be active in Inter-team cooperation 35 6 11 16 Promote FIRST mission Number of people who received 45,000 people 10,000 people 15,000 people 20,000 people nformation about FIRST Number of community event attended as Be active in community service 18 5 8 11 Customer Number of students recruited in year 30 30 30 30 Recruiting and induction Number of recruiting events 10 5 8 11 Percentage of student retention 95% 95% 95% 95% Number of press mentions of Team 980 9 3 5 7 Marketing process Simple and effective designs to meet our 100% 100% 100% 100% ame objectives Effective design Number of students using CAD to 8 6 9 10 contribute to the robot design % of team utilizing organizational tools Organization 100% 70% 75% 85% 1 week before first 2 weeks before 2 weeks before 1 weeks before Competition robot complete scrimmage competition competition competition Solid fabrication Build effective prototypes on time by build week 4.5 by build week 6 by build week 4 by build week 4 Student contribution to the source code 100% 100% 100% 100% Student contribution to the control design 100% 100% 100% 100% Effective controls Controls features meet robot design 100% 100% 100% 100% Processes bjectives Percentage of graduating students who go on to higher education 100% 100% 100% 100% 95% of students with 95% of students with 95% of students with 95% of students with 80% of attendance 80% of attendance. 80% of attendance. 80% of attendance. Commitment Attendance no student with less no student with less no student with less than 50% than 50% than 50% than 50% Number of hours for leadership and team eadership and team work 12 6 8 8 Personal Growth Increase partnership with sponsors Updates sent within the year 3 4 Number of potential new sponsor 15 TRD TRD TRD neetings Get new sponsors TBD TBD TBD 4 Number of new sponsors secured ncrease Student Fundraising Amount of money raised by students \$17,500 \$8,750 \$11,250 \$12,500 Financial



